

Remarks

The above Amendments and these Remarks are in reply to the Office action mailed March 5, 2004. Claims 1 – 18 are presented herewith for consideration.

I. Rejection of Claims 1-6, and 8-18 Under 35 USC 103(a)

Claims 1-6, 8-18 were rejected under 35 USC 103(a) as being unpatentable over Birkler, WO 00/29998 (“Birkler”) in view of Bowen et al, US Patent No. 5,832,519 (“Bowen”). Applicants respectfully traverse the rejection as follows.

A. No Clear Teaching or Motivation to Combine the References

To establish a *prima facie* case of obviousness based on a combination of references, there must be some teaching, suggestion or motivation in the prior art to make the specific combination that was made by the applicant. *In re Dance*, 160 F.3d 1339 (Fed. Cir. 1998). There must be a clear teaching that “a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.” *In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1998).

The Examiner correctly acknowledges the requirement to show some teaching or motivation to combine references in the Office action at page 6. However, as support for the motivation to combine the references, the Examiner has stated:

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Bowen et al., into ... Birkler *because both are directed to database management system*. (Emphasis added).

However, Applicants respectfully submit that under the applicable law, a motivation to combine references is not found simply because references relate to the same field. More must be shown to establish the requisite motivation. As stated by the Federal Circuit in *In re Dembiczak*, 175 F. 3d. 994 (Fed. Cir. 1999), “[w]e have noted that evidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved.” Merely stating that the two references relate to the same field does not meet these criteria. No showing has been made that the references themselves suggest the combination. No showing has been made that the suggestion to combine comes from the knowledge of one of ordinary skill. In this regard it is noted that it is not enough that the combination

would be well within the ordinary skill in the art. *Al-Site Corp. v. VSI Intern., Inc.*, 174 F.3d 1308, 1324 (Fed. Cir. 1999). The examiner needs to show the additional step of how this knowledge of the skilled artisan leads to the suggestion or motivation. And lastly, no showing has been made that the suggestion to combine comes from the nature of the problem to be solved.

With regard the last of the above-enumerated bases for finding a motivation, nature of the problem to be solved, the Examiner has further stated in the Office action as a basis for the motivation to combine:

One of ordinary skill in the art at the time of the inventing would have been motivated to modify the Birkler's reference, more specifically Birkler's fig 2 to incorporate the aggregation system fig 1, element 30 of Bowen et al. because [1] that would have allowed users of Birkler optimization of synchronization procedures that utilize a change log system to control the aggregation system processor to update and maintain in the log, [2]bringing the advantages of avoiding locking of database records for extended period of time, further greater levels of improving concurrency as suggested by Bowen et al. (emphasis added).

With regard to point [1] of the above-cited quote, the Examiner has stated here no more than that the Birkler can be used with Bowen. This is not permissible grounds for finding the requisite motivation. The fact that references *can* be modified or combined is not sufficient grounds to find a motivation to combine references. *In re Mills*, 916 F.2d 680, 682 (Fed. Cir. 1990).

With regard to point [2] in the above-cited quote from the Office action, the advantage cited by the Examiner is not the problem that was addressed by the present invention. Stated another way, one skilled in the art, when faced with the problem addressed by the present invention, would not look the combination of Birkler and Bowen for a solution. In particular, the problem addressed by the present invention is how to deal with the large amount of information, much of which being redundant, that is stored in change logs with synchronization systems. As stated in the application starting at page 12, line 22:

As changes are made for various classes of data, data packages accumulate on storage servers 12, 14 and consume valuable storage space. As the number of stored data packages increases, the amount of available storage space on storage servers 12, 14 correspondingly decreases.... In situations a user is limited, for example, to 25 megabytes ("M") of memory, the amount of available storage space continues to decrease as data packages are updated and change logs are accumulated, until storage space on the storage servers 12, 14 are exhausted.

Thus, prior to the present invention, each synchronization created a unique change log to record any changes in the data to be synchronized. The change log is subsequently

uploaded to network 10 via, for example, an Internet connection and stored in storage server 12. Over time, as the user performs additional synchronizations, the change logs accumulate and when a new client device, or a client device that has not been recently synchronized, is connected to network 10 and synchronized, all or some substantial subset of the accumulated change logs are downloaded and applied one at a time. Thus, if there are three change logs (e.g., a first change log may record a change in a contact's home phone number, a second change log may record an addition of a work phone number for the contact, and a third change log may yet record the deletion of the contact entirely), all three change logs must be downloaded and applied to the client device one at a time when a new client device is subsequently synchronized, even though the contact is ultimately deleted.

A skilled artisan when faced with this problem would not look to the combined teachings of Birkler and Bowen, which combination, as admitted by the Examiner, teaches optimizing a synchronization system with the "advantages of avoiding locking of database records." Locking refers to a protocol which slows down processing by preventing two different tasks from simultaneously modifying related database records. When the skilled artisan is faced with the problem of how to reduce the size of change logs for synchronization, this skilled artisan would not be motivated to combine a synchronization reference with another reference which teaches a system for avoiding locking. There is not a clear teaching that "a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." *In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1998). Without such a teaching, the cited references cannot be combined to render the claimed invention obvious.

Based on the above, it is respectfully submitted that there is no motivation to combine Birkler with Bowen found in the art. It is respectfully submitted that any such combination impermissibly comes only from the teaching of the present invention itself.

A. The Combined Teaching of Birkler with
Bowen Does Not Teach the Present Invention

As set forth above, it is respectfully submitted that there is no teaching or suggestion to combine Birkler with Bowen. However, even if the references were to be combined, the combined teaching of the references does not render obvious the present invention.

For example, independent Claim 1 recites a method for updating application data in a synchronization system, the method including in part the steps of:

downloading a first change log...;

adding said first change log to an aggregate change log, the aggregate change log comprising a summary of changes in said added change log and any previous change logs;

deleting said first change log;

repeating said downloading, adding, and deleting steps for a next change log of said plurality of change logs until no additional change logs exist; and

applying said aggregate change log to said application data to update said application data.

These steps are nowhere taught or suggested by Birkler or Bowen, taken alone or in combination with each other.

In the Office action, the Examiner acknowledges at page 5 that:

Birkler does not teach ‘aggregate change log, the aggregate change log comprising a summary of changes in said added change log and any previous change logs, applying said aggregate change log to said application data to update said application data.’

The Examiner states instead that these features are shown in Bowen. Applicants respectfully disagree. Claim 1 recites, in part, two separate and independent steps:

adding said first change log to an aggregate change log ... comprising a summary of changes in said added change log and any previous change logs;

applying said aggregate change log to said application data to update said application data.

The Examiner has indicated that the first relation base value of Bowen teaches the claimed aggregate change log, which is updated by the second relation incremental updates of Bowen. Applicants respectfully disagree. The first relation base values of Bowen are themselves application data, not a change log (aggregate or otherwise).

However, assuming for argument purposes that the Examiner is correct; that the first relation base values of Bowen would be considered the claimed aggregate change log and not application data, then Bowen has no teaching or suggestion of the step of applying the aggregate change log to said application data to update said application data. Clearly one of average skill in the art would not interpret the first relation base values of Bowen to be **both** the claimed aggregate change log and the

application data itself, and it is respectfully submitted that any such conclusion by the Examiner is based on impermissible use of the invention itself as a road map to reconstruct the claim.

Each of the remaining claims include similar limitations. See for example:

Claim 8:

a merging routine for iteratively aggregating the contents of said plurality of change logs to an aggregate log;

an updating routine for applying the contents of said aggregate log to said application data to update said application data.

And Claim 11:

adding said first change log to an aggregate log on the first client device;

applying said aggregate log to said application data to update said application data.

As each of the claims recites features nowhere taught or suggested in Birkler and Bowen, taken along or in combination with each other, it is respectfully requested that the rejection of Claims 1-6, 8-18 be withdrawn.

II. Rejection of Claim 7 Under 35 USC 103(a)

Claim 7 was rejected under 35 USC 103(a) as being unpatentable over Birkler in view of Bowen, and further in view of U.S. Patent No. 5,845,283 to Williams. Applicants respectfully traverse the rejection as follows.

Claim 7 depends on Claim 1, and is therefore patentable for each of reasons set forth above with respect to Claim 1. Namely, there is no teaching or suggestion to combine Birkler with Bowen, and, even if combined, the resulting combination does not teach or suggest the invention recited in Claims 1 or 7.

Based on the above, it is respectfully requested that the rejection of Claim 7 be withdrawn.

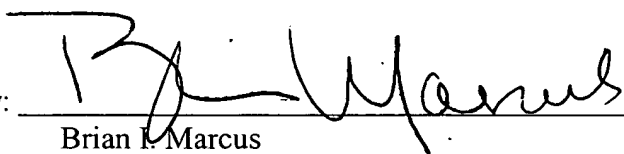
Based on the above remarks, reconsideration of claims 1 - 18 is respectfully requested.

The Examiner's prompt attention to this matter is greatly appreciated. Should further questions remain, the Examiner is invited to contact the undersigned attorney by telephone.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 501826 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

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